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SEROPREVALENCE AND RISK FACTORS OF *CHLAMYDIA TRACHOMATIS* GENITAL INFECTION IN MOROCCAN WOMEN

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introduction

Chlamydia trachomatis genital infections represent a worldwide public health problem, due to their frequency and to their huge economical and human tribute associated to their complications (pelvic inflammatory disease, extra-uterine pregnancy, infertility).

The aim of this study was to determine Chlamydia trachomatis seroprevalence and risk factors related to Chlamydia trachomatis infection in a moroccan population

Methods and material s

- prospective study over 6 months
- female patients who underwent Chlamydia trachomatis IgG screening.
- patient consent.
- Chlamydia trachomatis IgG testing:
  - sera samples
  - immune-enzymatic technique (Serion ELISA Anti Chlamydia trachomatis IgG©)
  - Statistical analysis was performed by SPSS 17* (SPSS inc)

Results

198 women were included, mean age was 47.3±9.6 year-old. 92% of patients were married and 34.4% were menopausal. Mean menarche age was 13.6±1.9 years, Mean age of sexual activity beginning was 21.5±6.7 years, Mean age at first pregnancy was 22.7±4.9 years, sexual partners mean number was 1.1±0.3, pregnancies mean number was 3.5±2.2. Patients were from urban origin in 75.5% cases, they were analphabet in 47.7% and their income was between 2000 dh and 5000 dh in 93.3%. (Table I)

Seroprevalence of anti Chlamydia trachomatis IgG was 6%. median title was 52.50 UI/ml [36.25-108.75].

Chlamydia trachomatis IgG *detection was statistically associated with* women age (p=0.036), menarche age (p=0.006), number of pregnancies (p=0.031), and menopausis (p=0.044). (Table II)

Table I: Study population description

Caracteristics	Number (%) or Means±SD
Origin:	
Urban	150(75.5)
Rural	48(24.5)
Study level :	
analphabet	95(47.7)
Primary-secondary	92(46.8)
university	11(5.5)
Economic statut :	
<2000 dh/month	8(4.0)
2000 and 5000 dh/month	184(93.0)
>5000 dh/month	6(3.0)
Matrimonial statut :	
maried	182(92.0)
single	4(2.0)
widow	10(5.0)
divorced	2(1.0)
Menopause	68(34.4)
Pregnancy :	
Yes	170[85.8)
none	28(13.9)
Oral contraception	144(72.7)
age	47.3±9.6
menarche	13.6±1.9
Age at first pregnancy	22.7±4.9
Age of sexual activity begining	21.5±6.7
Partners	1.1±0.3
Pregnancies	3.5±2.2
abortion	47.3±9.6
Intrauterin deaths	47.3±9.6

Table II: Risk factors vs *Chlamydia trachomatis* serology status

	Presence IgG Anti CT	Absence of IgG anti CT	p
age	41.63±6.022	47.26±9.947	0.036
Menarche age	12.6±0.548	13.67±1.910	0.006
Pregnancies	2.71±0.756	3.57±2.289	0.031
Sexual activity beginning age	22.29±5.648	21.24±6.544	0.651
Menopausis Yes no	 6(9%) 0(0%)	 62(91%) 130(100%)	0.045
Origin: Urban rural	 7(4.6%) 4(8.3%)	 143(95.4%) 24(91.7%)	0.386
Economic status: <2000dh 2000-5000dh >5000dh	 0(0%) 12(6.5%) 0(0%)	 8(100%) 172(93.5%) 6(100%)	<0.001
Study level: Analphabet Primary-secondary university	 0(0%) 7(7.6%) 1(9%)	 (100%) 85(92.4%) 10(91%)	0.867
Genital infection anteriority Yes No	 2(3.3%) 11(7.9%)	 57(96.7%) 128(92.1%)	0.221

Discussion

Chlamydia trachomatis seroprevalence found in our study is lower than seroprevalences reported from (United states: female children<21 ans :11.6% (1) /netherland women: 10% (2)

As far as we know there is no Moroccan data about Chlamydia trachomatis seroprevalence since the 90s (7.5% blood donors and 12.5% STI population) 3.

other risk factors a part from age were not found in our study such as number of sexual partners (>10), low income, no use of condoms, and younger age at fisrt sex. (4)

Conclusion

Our finding represent preliminary data and need to be completed by a lerger screening in order to assess prevention of *Chlamydia trachomatis* infection policy in our area

Contact information

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